

CAAL  
April 6, 2006  
Agenda Item # 4

## MEMORANDUM

**To:** Dr. Vermelle Johnson, Chairman, and Members, Committee on Academic Affairs and Licensing

**From:** Dr. Gail M. Morrison, Director of Academic Affairs and Licensing

**Consideration of**  
**Improving Teacher Quality Competitive Grants Awards,**  
**FY 2006-07**

### **Background**

Since 1984, the Commission on Higher Education has been responsible for administering federal funds under a Title II program of *The Elementary and Secondary Education Act (ESEA)*. In 2001, the federal legislation was re-authorized under *The No Child Left Behind Act*. Title II Part entitled *A Preparing, Training, and Recruiting High-Quality Teachers and Principals*, authorizes the Commission to conduct a competitive awards program. The purpose of this part of the federal legislation is to provide support to:

increase student academic achievement through strategies such as improving teacher and principal quality and increasing the number of highly qualified teachers in the classroom and highly qualified principals and assistant principals in schools.

The Commission is authorized to provide a competitive grants program to partnerships comprised, at a minimum, of schools of education and arts and sciences from higher education institutions along with one or more high-need local education agencies (LEA; defined as school districts). Additional partners may be included as defined by the legislation. Funds to the state are allocated based on the FY 2001 amount received under the former *Eisenhower Professional Development* and *Class-Size Reduction* programs. Any remaining funds from the federal appropriation are distributed

through a formula based on the State's school-age population and percent of these children in families with incomes below the poverty level.

Under federal regulations, 2.5 percent of the *Improving Teacher Quality Higher Education Grants* (ITQ) funds for the state are allocated to the Commission to be used for the competitive grants program. The Commission is expected to have \$900,000 with which to make awards with Federal FY 2006-07 awards. Proposed projects may request up to \$200,000 in funds per year. Average budget requests for both continuing and new projects range from \$85,000 to \$200,000. The Commission seeks proposals that will have maximum impact and encourages multi-year programs to assure positive results on the target audience. The number of grants awarded will be determined primarily by the quality of the proposals submitted and the size of the negotiated final budgets in comparison to the total funds available. Equitable geographic distribution (i.e., districts served) must be considered in making awards, assuming proposals are deemed to be of high quality. No proposal will be considered unless it meets the minimum federal definition of a partnership (as stated in the *ITQ Guidelines* and in the *Federal Title II Non-Regulatory Guidance*).

A listing of the new proposals received is included as **Attachment 1**. This attachment also indicates which proposals are recommended for funding by the Review Panel. There are nine continuing projects for FY 2006-07 that are recommended for funding as indicated in **Attachment 2**.

A review panel consisting of K-12 and higher education representatives (**Attachment 3**) met on March 8, 2006, to review and rate the proposals submitted for consideration. Abstracts describing all of the proposed projects are included in **Attachment 4**. A total of 10 proposals were received by the Commission for consideration. The panel recommended funding three proposed projects. Members of the review panel noted that many proposals contained inadequate evaluation plans related to student achievement. The panelists also voiced concern about the lack of evidence of collaboration with the partners in the planning of the projects.

### **Overview of Improving Teacher Quality Higher Education Grants *Guidelines***

The higher education program is a competitive grants program with the primary focus on professional development; however, there are several significant changes under the legislation. Foremost is that the Commission will only award grants to eligible partnerships that must be comprised of, at a minimum, (1) a private or public institution of higher education and the division of the institution that prepares teachers and principals; (2) a school of arts and sciences; and (3) a high-need local education agency (defined in the legislation as a school district based upon U.S. census data). Additional partners may also be included. Another change is that there is no longer a focus on science and mathematics but that nine core academic areas (English, reading or language

arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography) can be addressed in proposals. Professional development may focus on in-service and pre-service teachers as well as principals and paraprofessionals. The emphasis of the proposed projects must be on low-performing districts and schools, and the Commission is charged with ensuring an equitable geographic distribution of grants.

The priority areas that proposals must address derive from the federal legislation as well as those identified in the State's Consolidated State Plan submitted to the U.S. Department of Education.

### **Review Panel Recommendations**

The review panel determined that three of the 10 eligible proposals were fundable projects. The members of the review panel made recommendations for programmatic and budgetary changes for each of the ten projects. The Review Panel made several general comments regarding the quality of the proposals that the staff will use in future outreach activities with the institutions concerning the program. Many of the proposals received poor reviews because of the weak quality of the proposed partnership, evaluation plan or meeting the needs of teachers and students. Several proposals were cited as having very weak evaluation plans, which are required by the *Guidelines*. The federal legislation directly links teacher quality to student achievement, yet few of the proposals evaluated the projects' activities in relation to student achievement.

The funding amount requested for the new awards is \$526,736. The total amount requested for all proposals submitted is \$1,680,435.50. In addition, the second and third year of funding for awards made under the FY 2004-05 and 2005-06 grant competition total \$1,064,305.36 for a total of \$1,591,041.36. Carry forward funds from FY 2004-05 (\$591,961.51) will be used for expenditures through September 1, 2006.

In addition to the three new projects, nine previously funded Improving Teacher Quality Higher Education projects will continue to function during the coming year, while five other projects have concluded.

### **Staff Recommendation**

The staff recommends that the Committee on Academic Affairs and Licensing approve on behalf of the Commission the review panel's funding recommendations as depicted in **Attachment 1**. The Committee was given the authority to make the awards on behalf of the Commission several years ago. In keeping with the procedure from previous years, the staff requests the authority to negotiate the final program activities and budgets with the project directors (as per the recommendations of the review panel).

Funding will be contingent upon the project directors' revisions of the proposed projects to meet the review panel's recommended changes.

<b>Improving Teacher Quality FY 2006-07 (State) No Child Left Behind New Proposals Submitted</b>					
Proposal #	Institution	Project Title	Project Director	Funds Requested	Recommended for Funding
ITQ06-01	Citadel Military College	Lowcountry Leadership Academy	Kent Murray	YR1 \$173,452 YR2 \$198,311 YR3 \$197,212 YR4 \$197,212	<b>NO</b>
ITQ06-02	Claflin University	Subject Area Development for Educators (SADE)	Tina Marshall-Bradley	\$111,712.50	<b>NO</b>
ITQ06-03	Clemson University	Content Area Literacy and Learning in the Elementary Grades	Pamela Dunston Kathy Headley	YR1 \$199,097 YR2 \$199,858 YR3 \$199,858 YR4 \$199,858	<b>NO</b>
ITQ06-04	Clemson University	Expanded South Carolina Studies: An Interdisciplinary Approach to Meeting 8 <sup>th</sup> Grade Standards	John Wagner	YR1 \$198,944 YR2 \$199,857 YR3 \$197,816 YR4 \$198,823	<b>NO</b>
ITQ06-05	Columbia College	Making Math and Technology High-quality (MMATH)	Kathy Coskrey	\$179,046	<b>YES</b>
ITQ06-06	Francis Marion University	Improving Teacher Quality (ITQ) – FMU Action Research	Tammy Pawloski	YR1 \$144,245 YR2 \$144,742 YR3 \$146,102 YR4 \$147,031	<b>NO</b>
ITQ06-07	Francis Marion University	Improving Teacher Quality (ITQ) – FMU Professional Development	Tammy Pawloski	YR1 \$185,598 YR2 \$185,954 YR3 \$186,548 YR4 \$186,926	<b>NO</b>
ITQ06-08	University of South Carolina	High School Teacher Inquiry and Technology Professional Development Program	Christine Lotter	YR1 \$150,000 YR2 \$150,000 YR3 \$150,000 YR4 \$150,000	<b>YES</b>

**Improving Teacher Quality  
FY 2006-07 (State)  
No Child Left Behind  
New Proposals Submitted**

Proposal #	Institution	Project Title	Project Director	Funds Requested	Recommended for Funding
ITQ06-09	University of South Carolina – Upstate	Using Problem Based Learning in Mathematics Classrooms – Grades 6-8	Valerie Duarte	\$140,651	<b>NO</b>
ITQ06-10	Winthrop University	Pee Dee Leadership Academy	Jonatha Vare	YR1 \$197,690 YR2 \$195,750 YR3 \$185,123 YR4 \$197,478	<b>YES</b>
		<b>First Year funding request Total</b>		<b>\$526,736.00</b>	

**Attachment 2**

**Improving Teacher Quality Higher Education  
Continuing Projects  
FY 2006-07**

<b>Institution</b>	<b>PI</b>	<b>Project Title</b>	<b>High Need LEA(s)</b>	<b>Additional LEA(s)</b>	<b>2006-07 Award</b>	<b>Planned Activities – 2007-07</b>
Converse	Martha Lovett	Vertical Teaming and curriculum Alignment to State Standards (Middle Grades)	Cherokee County	Union County, Spartanburg 1	\$116,446.00	<ul style="list-style-type: none"> <li>• <b>Year 3 (of 3)</b></li> <li>• Grades 6-12</li> <li>• Vertical Teaming Strategies</li> <li>• 3-day institute in SS and Science methodology</li> <li>• Two graduate specific content courses offered spring 2007</li> <li>• Workshops repeated on brain research and literacy for Cherokee County Schools</li> <li>• Two teachers from each district sent to the two-day fall conference of</li> </ul>

<b>Institution</b>	<b>PI</b>	<b>Project Title</b>	<b>High Need LEA(s)</b>	<b>Additional LEA(s)</b>	<b>2006-07 Award</b>	<b>Planned Activities – 2007-07</b>
						SCATE/SCACTE
Francis Marion	Derek Jokisch	Middle School/Higher Education Partnership in Science Education	Florence 2,3; Marion 1,2; Dillon 1; Clarendon 3; Marlboro; SC	Florence 1; Misc. Private Schools; Governor's School for Science and Mathematics	\$117,250.00	<ul style="list-style-type: none"> <li>• <b>Year 3 (of 4)</b></li> <li>• Summer Science Institute</li> <li>• Middle School Science Content courses</li> <li>• Professional Development on “best practices” in teaching science</li> <li>• Involvement of 6-8 students from local districts</li> </ul>
USC – Columbia	Rhonda Jeffries	Increasing 2 <sup>nd</sup> and 3 <sup>rd</sup> Grade Teachers' Mathematics Knowledge Using Standards-Based Instructional Strategies and Homework Assignments	Richland School District 1		\$85,055.00	<ul style="list-style-type: none"> <li>• <b>Year 4 (of 5)</b></li> <li>• Focus on three schools in Richland 1</li> <li>• Use of <i>Cognitively Guided Instruction (CGI)</i> – emphasis is number and algebra</li> <li>• Shift in training to Algebra readiness</li> <li>• Planning and implementation of Family Math Nights at elementary schools</li> </ul>
Converse	Nancy Breard	Professional Development in Literacy (shared books)	Spartanburg 7	Newberry; Spartanburg 4, 5	\$121,815.36	<ul style="list-style-type: none"> <li>• <b>Year 3 (of 4)</b></li> <li>• Focus on collecting data in classroom</li> <li>• Graduate Courses in Literacy offered on-site</li> <li>• Summer Institute</li> <li>• Book study - Authors of books work with teachers</li> </ul>
USC-Aiken	Tom Reid	Developing High Quality Middle School Mathematics Teachers	Orangeburg 4	Lexington 4	\$124,771.00	<ul style="list-style-type: none"> <li>• <b>Year 3 (of 4)</b></li> <li>• 3 new courses: Computers, Assessment in mathematics, middle school math methods</li> <li>• Courses team taught by a mathematician and a mathematics educator</li> <li>• Videotaping of courses for future distance education use around state</li> </ul>

<b>Institution</b>	<b>PI</b>	<b>Project Title</b>	<b>High Need LEA(s)</b>	<b>Additional LEA(s)</b>	<b>2006-07 Award</b>	<b>Planned Activities – 2007-07</b>
USC – Columbia	Jon Singer	Middle School/Higher Education Partnerships in Science Education	Richland 1; Sumter 2; Lexington 2	Richland 2; Lexington 1,5; Sumter 17	\$124,120.00	<ul style="list-style-type: none"> <li>• <b>Year 3 (of 4)</b></li> <li>• New science standards may mean additional participants</li> <li>• Summer institutes for teachers</li> <li>• Developing a second cohort – supporting two cohorts so there will be 2 curriculums</li> </ul>
Francis Marion University	Tammy Pawloski	Improving Teacher Quality	Marion 2, 7 Dillon 2		\$124,848	<ul style="list-style-type: none"> <li>• <b>Year 2 (of 4)</b></li> <li>• New project – Fall, 2005</li> <li>• Project year 1 ends October 15, 2006</li> <li>• Field testing, revision, and dissemination of completed units from year 1</li> <li>• Development of standards-based units for science</li> </ul>
Clemson University	Anna Baldwin	Digital Express	Greenville, Chester, Spartanburg 7	Oconee	\$125,000	<ul style="list-style-type: none"> <li>• <b>Year 2 (of 4)</b></li> <li>• New project – Fall, 2005</li> <li>• Project year 1 ends March 15, 2007</li> <li>• New cohort of teachers trained in year 2</li> <li>• Training and equipping teachers to use technology effectively in support of writing instruction</li> <li>• Implementing technology-integration practices in the classroom curriculum.</li> </ul>
Clemson University	Donna Diaz	Building a Mathematical Learning Community	Greenville		\$125,000	<ul style="list-style-type: none"> <li>• <b>Year 2 (of 4)</b></li> <li>• New project – Fall, 2005</li> <li>• Project year 1 ends March 15, 2007</li> <li>• Teachers will use inquiry-based instructional practices to support learning of SC Geometry and Measurement standards</li> </ul>

<b>Institution</b>	<b>PI</b>	<b>Project Title</b>	<b>High Need LEA(s)</b>	<b>Additional LEA(s)</b>	<b>2006-07 Award</b>	<b>Planned Activities – 2007-07</b>
		<b>Total Requested</b>			<b>\$1,064,305.36</b>	

### Attachment 3

#### **Improving Teacher Quality Review Panel FY 2006-07**

Randall LaCross  
Director of Outreach and GEAR UP  
SC Governor's School for Science and  
Math

Catherine Samulski  
Division of Teacher Quality, Title II  
SC Department of Education

Mrs. Theresa Davis  
Assistant Professor  
Department of Mathematics and  
Computer Science  
Claflin University

Dr. Leonard McIntyre, Dean  
College of Education, Humanities and Social  
Sciences  
South Carolina State University

Lori Ann Smith  
Science Coordinator  
NBCT  
Sumter District Two

Dr. Tim Lintner  
Assistant Professor of Social Studies  
Education  
School of Education  
USC-Aiken

T. Michael Raley, Ph.D.  
Program Manager  
Academic Affairs & Licensing  
SC Commission on Higher Education

Dr. Anita Dutrow  
Chair, Education Department  
Presbyterian College

#### *Staff Coordinator of Review*

Paula A. Gregg, Ph.D.  
Program Manager  
Academic Affairs & Licensing  
SC Commission on Higher Education

### Attachment 4

#### ***Proposal # ITQ06-01: Lowcountry Leadership Academy***

Project Directors: Kent Murray  
School of Education  
The Citadel

The Yamacraw Academy of School Leadership and Professional Development will be the vehicle for the provision of ongoing, research-based, job-embedded professional development for educational leadership and professional development among educators within Charleston County. This concept, based on the Mayerson Academy of Cincinnati, Ohio, will provide professional development for teachers and principals within the Charleston County School District. Upon a successful first year of the project, we will seek to expand the Academy to serve other smaller school districts in

neighboring areas of Charleston County that have similar needs to Charleston County School District but face financial barriers of funding professional development for their teachers and principals.

There will be two divisions of the Academy, The Center for Principal Leadership, and The Center for Teaching Excellence. The Center for Principal Leadership will enable us to target the specific needs of Principals who are in a particular stage of their career path. The main focus will be on two groups: LEAP and ASPIRE. The curriculum will be designed to differentiate the professional needs of individuals who desire to become principals and already possess certification in educational leadership (*LEAP*) and those highly qualified teachers who desire to earn initial certification in educational leadership (*Aspire*). A third component will be added in the future years of the Academy to include the Management College, focusing on the professional development needs of supervisors in all parts of the organization and providing opportunities to receive training in effective leadership and management. The second division of the Academy, The Center for Teaching Excellence, will target professional development needs for teacher leaders. This division will comprise of professional development, a consultant database, NCLB support and curriculum support.

This educational leadership initiative is critical to the future success of students, as effective school leadership is second only to the teacher in improving student achievement. For a number of years, a vast majority of school leaders have been ill-prepared for the complexities and the challenges they face on a daily basis. The Leadership Academy provides the mechanism for identifying, recruiting, and effectively developing educators, especially for those struggling schools with high needs populations. Better trained school leaders and educators will also result in principals and teachers who are more effective mentors to those who are new to the profession. We expect that focused, thoughtful professional development will encourage principals and teachers alike to remain in their current positions for longer periods of time, decreasing the dramatic turnover we are currently experiencing. Given this result, as research demonstrates, improved school leadership will lead to improved student outcomes.

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***Proposal # ITQ06-02: Subject Area Development for Educators (SADE)***

Project Directors: Tina Marshall-Bradley, John Phillips

School of Education

Claflin University

Through Claflin University's recent strategic plan, it was determined that university programs must be responsive to the needs of community based organizations. In light of this charge from the senior administration and the board of trustees, a series of meetings have taken place over the past year to determine the needs of local schools and school districts. These meetings have resulted in discrete projects to meet the needs of

teachers and other educators in the identified school districts. Based on the identified need to strengthen the content knowledge of current teachers in the district, the Subject Area Development for Educators (SADE) program was developed.

The purpose of the Subject Area Development for Educators (SADE) is to engage practicing teachers in the act of identifying their subject matter knowledge through discourse on student learning, using existing curricular materials, and student work (i.e. class work and standardized test results) to increase their understanding of their own subject matter knowledge. In addition to teachers' knowledge of subject matter and the relationship with instructional practices, it is imperative that educators who support classroom teachers have a need to engage in their own content knowledge in support of the work of classroom teachers.

The Subject Area Development for Educators (SADE) program will use a train the trainer model to strengthen the content knowledge of teachers and other educators with teams of individuals from all grade levels being trained in methodologies for increasing content knowledge specific to teachers and using student data to make decisions about their instruction. The program will be evaluated using pre- and post tests for program participants, as well as student test scores to determine the effectiveness of the project.

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***Proposal # ITQ06-03: Content Area Literacy and Learning in the Elementary Grades***

Project Directors: Pamela J. Dunston, Kathy N. Headley  
School of Education  
Clemson University

This project will establish a collaborative partnership with Clemson University's Department of Teacher Education, Department of History, Department of Mathematical Sciences, Department of Biological Sciences, Center of Excellence for Adolescent Literacy and Learning, and the following Local Education Agencies: Bamberg One, Bamberg Two, Hampton One, Hampton Two, and Orangeburg Consolidated School District Four.

The proposed partnership will focus on improving literacy and learning in elementary schools, second through fifth grades. Using a ***Peer-Teaching*** model, Teacher Leadership Teams from each participating elementary school, grades 2-5, will strengthen their content knowledge base and instructional effectiveness in reading/language arts, mathematics, science, and social studies. This process will involve two years of professional development. In an effort to meet school districts' needs, in the first year, Teacher Leadership Team Apprentices will enhance their (a) content knowledge base through workshops with Clemson University faculty from the departments of biological science, mathematical science, history, and literacy education; (b) pedagogical

knowledge through the use of scientifically-based strategies that improve instruction and that concurrently improve students' literacy; (c) knowledge of state standards, assessment use, and interpretation of assessment results for the purpose of improving instructional practice and student learning. During year two Teacher Leadership Team Interns will perfect their content knowledge base, teaching effectiveness, assessment practices, and build leadership skills for working with and mentoring other teachers. A key transition point will be the summer between the apprentice and intern years when Teacher Leadership Teams will come to the Clemson University campus for a Leadership Institute where they will learn and share strategies with other content area teachers at the middle and secondary school levels. A critical supporting element for Teacher Leadership Teams will be a website where teachers can access instructional strategies and teaching materials as well as receive support from Clemson University faculty and other educators through chat rooms and discussion boards. The key components of the project described in this proposal are:

### **Professional development**

- Development of Teacher Leadership Teams in elementary schools that will provide ongoing local professional development in elementary school content area classrooms within their districts.
- Collaboration between Clemson University and the participating school districts to ensure that workshops are directly connected to the real-world needs of the schools.
- An annual Leadership Institute to provide pre- and in-service teachers an opportunity to interact with experts in the field of education.
- A Teacher Leadership Team web site to facilitate communication among participating Apprentices, Interns, content area specialists, as well as in-service and pre-service teachers.

### **Pre-service Preparation**

- Enrichment of elementary literacy methods course through the use of cases developed by Teacher Leadership Teams.
- Support for elementary education methods students through the development of materials, resources, and Teacher Leadership Teams web site.

The center will serve approximately **25 Teacher Leadership Team Apprentices** in the initial year (Cohort I). During the second year of the project, Teacher Leadership Team Interns will perfect their content knowledge base, teaching effectiveness, and build leadership skills for working with and mentoring Cohort II Teacher Leadership Apprentices. Each Teacher Leadership Team will train approximately 25 teachers in their own schools, districts, or neighboring districts. By the third year of the project, **75 elementary classroom teachers and their students** in partner schools and districts will have been affected. If the third year involves 75 teachers, 2,150 or more students could benefit from their teachers' participation. A district's two-year investment in developing

a teacher's expertise will touch the lives of each child and colleague with whom the teacher works for the rest of his or her career.

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***Proposal # ITQ06-04: Expanded South Carolina Studies: An Interdisciplinary Approach to Meeting 8<sup>th</sup> Grade Standards***

Project Directors: John R. Wagner

Geology Department

Clemson University

The schools along the Interstate-95 corridor include some of the poorest performing schools in the state. The SC GEAR UP project has already gathered twenty-one of these middle schools into a consortium through which they will provide assistance to both teachers and students and track the progress of a particular student cohort over a six year period. During the 2006-07 school year, those students will be in the eighth grade. Eighth grade is also the focus of the South Carolina Studies unit lessons, which are thematically based interdisciplinary activities that focus on local landscapes, history, and culture, that were developed during a previous ITQ grant to Clemson University. Other groups, including COSEE SE, the South Carolina State Park Service, and the SC MAPS and SC LIFE Project Offices at Clemson have also targeted one or more of these high-need SC GEAR UP schools for teacher outreach programs. Through a series of conversations, representatives from each group agreed to cooperate in a partnership of shared goals and objectives under the umbrella of the Expanded South Carolina Studies project proposal. Each partner has agreed to provide specified materials, services, and financial resources to the four year project. The South Carolina Studies unit lessons will be implemented in as many of the targeted schools as possible during the first year of the project. By the end of the grant, these curriculum materials will be in use in all twenty-one schools.

Another part of the project provides sustained, inquiry based professional development opportunities to teachers at all of the SC GEAR UP schools. Two new graduate courses, one focusing on interdisciplinary math, the other focused on initiating community based interdisciplinary research, will be offered each year through Clemson University. These courses will incorporate appropriate instructional technology, such as graphing calculators, and will rely extensively on distance learning delivery systems to make it possible for teachers to do most of the classwork and assignments through a web based course management system. Two other existing summer courses, an Ethnobotany course developed by SC LIFE and the Discover Carolina Summer Field Course, developed by the South Carolina State Park Service, will be modified to accommodate specific needs of the SC GEAR UP teachers. Other professional development workshops and opportunities will be custom designed to meet individual school needs and will be delivered to teachers at their schools.

A final component of the project is to foster the development of community based student research projects like what SC LIFE has begun in Florence School District #3, which is the primary LEA for this new grant. The initial focus will be to complete their community based research as a demonstration project for other schools to emulate. Project staff will research the local area around other schools and select one new SC GEAR UP school each year to begin their own research project.

By the end of the four year project, each of the twenty-one SC GEAR UP schools will have at least some of the South Carolina Studies unit lessons incorporated into their eighth grade curriculum. Ten community based student research projects will have been designed and carried out as demonstration projects. Hundreds of teachers will have received graduate credit or recertification credit for coursework, and assessment data will have been analyzed and reviewed, and the results summarized in published reports. The most important outcome, however, is that these teachers and ultimately their students will have developed an enhanced appreciation for the interconnectedness of natural and human history and the diversity of the cultural and natural landscapes of their own state.

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*Proposal # ITQ06-05: **Making Math And Technology High Quality (MMATH)***

Project Directors: Lynn Noble, Kathy Coskrey

Education Department

Columbia College

The proposed MMATH program has been designed to meet two of the identified needs of Richland District One early childhood classrooms (4K – 2) in math and technology instruction and achievement. First, the District PACT scores for third grade math are low and continue to decline throughout elementary and middle school. Research suggests that laying a strong and appropriate foundation for mathematics learning in the early grades will serve to improve students' understanding and therefore raise the scores. In addition, the use of technology as a teaching tool, and as a learning supplement will strengthen student learning. Secondly, the District has recognized early childhood education as separate from elementary education and has initiated separate professional development activities for teachers in grades 4K through 2.

The proposed MMATH program is designed to enhance the professional development program for 160 (over four years) 4K – grade 2 teachers in Richland District One, in order to improve teacher ability to provide a solid mathematics and technology foundation for students, augment the 4K through grade 2 mathematics and technology curriculum so it is standards-based, developmentally appropriate and culturally responsive and increase student competency in mathematics and technology each year of the grant as measured by grade-specific check-lists and tests.

The design of the project is a collaborative partnership between Richland District One early childhood personnel, and faculty from the Departments of Mathematics and Computing and Education at Columbia College. This team will work together to create two 2-hour graduate courses that will equip teachers with the mathematics knowledge, early childhood pedagogy and technological skill to provide appropriate mathematics instruction. Following the two semesters of course work, small groups will continue to meet and enhance knowledge and ability, and individual coaching in the classrooms will ensure that teachers can meet their students' needs in math. In addition, a curriculum for each grade level (4K – 2) will be written by professionals and participants that will focus on specific needs of the district as identified in a survey of teachers, be culturally sensitive and developmentally appropriate. Technologies and resources will be purchased that will enable teachers to more creatively and fundamentally introduce and apply mathematical concepts in each grade.

The project is also designed to have maximum impact on the District. Each year of the grant, ten schools will be named by the District – all schools will be served during the four years. Four teachers from each school (4K, K, 1 and 2) will participate – 160 teachers over the four years of the grant. This has the potential to impact at least 8,000 primary aged students in Richland District One during the four years of the grant.

Evaluation of the MMATH project is designed to explore the impact of and correlation between the many strands of this project. The evaluation will be conducted by a professional with educational evaluation experience and expertise.

There will be several products generated by this project. The two graduate course syllabi and accompanying materials, the small group and coaching plans, the four curricula and the evaluation document will be available to school districts and teacher education institutions in South Carolina. The results of this project will also be disseminated in workshops and through publication.

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***Proposal # ITQ06-06: Improving Teacher Quality (ITQ) – FMU Action Research***

Project Directors: Tammy Pawloski

Center of Excellence

Francis Marion University

The Pee Dee Region of South Carolina encompasses some of the state's most at-risk children. For the 18 districts in the region, the median poverty index is 83.8%, while statewide it is 70.5%. The extent of poverty in this region is so great that it impacts negatively on student achievement. The improvement ratings on school report cards have shown an alarming decline, with recent increases in the below average and unsatisfactory ratings. Six of these districts appear on the eligible partner "high needs" list and are included in this proposal.

This high concentration of poverty in a single geographic area provides both a challenge and an opportunity. Located near the geographic center of the Pee Dee region, Francis Marion University (FMU) has demonstrated its willingness to face that challenge and use it as an opportunity to focus the combined resources of the university and its partners. In 2004, FMU established a Center of Excellence to Prepare Teachers of Children of Poverty (COE). Through a combination of resources from The Center, the College of Liberal Arts and seven local school districts (Darlington, Dillon 2, Florence 1, Florence 2, Marion 1, Marion 2, and Marion 7), the proposed project would focus on specific professional development needs of classroom teachers.

On-going discussions with school personnel revealed many teachers, even those with more than five years teaching experience, who report a number of problems related to effective classroom management. There is a need to establish well-managed classrooms to provide a more favorable environment for implementing any reform efforts designed to improve student outcomes. A recent COE sponsored initiative with 11 classroom teachers from partner school districts focused on action research projects that aimed to improve the teachers' ability to enhance classroom management. The success of this project has prompted the COE Advisory Committee to create opportunities for a greater number of teachers to learn action research methodology and apply the methodology to solving individually identified problems.

An action research model was chosen as the process for exploring problems and solutions because it provides a structure for planning, implementing, observing, reflecting upon, and adjusting classroom practices. Action research formalizes, through rigorous observations and written reflections, what happens naturally in efficient learning environments. The use of action research also facilitates communication among colleagues engaged in the same process. The action research process will roll-out over the course of an entire school year. Although the primary project goal is to ensure effective procedures for managing classrooms, this project provides a sustained, intensive, high quality professional development opportunity that is classroom focused. Teachers from the partner districts will learn skills that will have a positive and long lasting impact on classroom instruction. Action research naturally creates a role for teachers as researchers and will give teachers the skills and experiences to maximize teaching/learning efficiencies while improving educational outcomes for children.

Dr. Tammy Pawloski, Director of the Center of Excellence to Prepare Teachers of Children of Poverty will oversee this project. Dr. Pawloski has guided a number of successful COE activities. The leadership for this project will be provided by Dr. Lorin Anderson, a nationally known researcher, who has guided a number of successful COE activities. Sixty teachers and sixty undergraduate students will be recruited as project participants. Upon completion of individual action research projects, a final project report and a research synthesis will complement frequent COE website postings. All quantitative and qualitative project data will be available to other groups wishing to

implement similar projects. This project will impact change and have a profound influence on classroom and school practices.

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***Proposal # ITQ06-07: Improving Teacher Quality (ITQ) – FMU Professional Development***

Project Directors: Tammy Pawloski

Center of Excellence

Francis Marion University

The Pee Dee Region of South Carolina encompasses some of the state's most at-risk children. For the 18 districts in the region, the median poverty index is 83.8%, while statewide it is 70.5%. The extent of poverty in this region is so great that it impacts negatively on student achievement. The improvement ratings on school report cards have shown an alarming decline, with recent increases in the below average and unsatisfactory ratings. Six of these districts appear on the eligible partner "high needs" list and are included in this proposal.

This high concentration of poverty in a single geographic area provides both a challenge and an opportunity. Located near the geographic center of the Pee Dee region, Francis Marion University (FMU) has demonstrated its willingness to face that challenge and use it as an opportunity to focus the combined resources of the university and its partners. In 2004, FMU established a Center of Excellence to Prepare Teachers of Children of Poverty (COE). Through a combination of resources from The Center, the College of Liberal Arts and seven local school districts (Darlington, Dillon 2, Florence 1, Florence 2, Marion 1, Marion 2, and Marion 7), the proposed project would focus on specific professional development needs of classroom teachers.

Consistent with the ITQ funding priority areas, the Center of Excellence is seeking support to fund a number of professional development opportunities to enhance the content and pedagogical knowledge of elementary and secondary teachers in the core academic subjects. The proposal will include the following: development of recertification courses to be offered during the summer months and school year; a Summer Institute to address the needs of rural elementary and secondary educators; revision of targeted graduate level courses to include research and best practices relative to the needs of at-risk, rural learners; and, development of new graduate level courses designed from "the ground up" by a Task Force of Pee Dee teachers and FMU faculty. The activities funded by this grant will be directly tied to the State of South Carolina content and assessment standards.

The leadership for this project will be provided by a project manager under the supervision of Dr. Tammy Pawloski, the Center of Excellence Director. Dr. Pawloski has guided a number of successful COE activities. At least 400 educators from the Pee Dee

will be involved in project activities. Each year a project report with evaluation findings will complement frequent COE website postings. All quantitative and qualitative project data will be available to other groups wishing to implement similar projects. This project will impact change and have a profound influence on classroom and school practices.

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***Proposal # ITQ06-08: High School Teacher Inquiry and Technology Professional Development Program***

Project Directors: Christine Lotter  
Instruction and Teacher Education  
University of South Carolina

In collaboration with local high need districts (i.e., Richland 1, Lexington 2, Orangeburg 5, and Sumter 2); the proposed professional development project is designed to improve the content knowledge, inquiry-based instruction, and use of technology among South Carolina high school science teachers. The design of the four-year professional development program meets the needs of the four participating districts and aligns with the requirements of high quality professional development.

The program is unique in that it provides both content and pedagogy instruction, provides teachers with practice teaching with local high school students during the summer workshop, and provides intensive in-classroom coaching to support the teachers' instructional changes during the academic year. The professional development begins with an intensive two-week (7 hours a day for 10 days) workshop that will strengthen the 25 teachers' science content knowledge through participation in technology enhanced inquiry-based science lessons that align with the South Carolina State Standards. Teachers will learn both content and instructional skills through their participation in the inquiry/technology lessons and their interaction with University of South Carolina science and education faculty. Interactive science investigations that utilize technology will serve as models of inquiry techniques that the teachers can incorporate into their own high school classrooms. The professional development experience continues with the teachers enacting their workshop-developed lessons with local high school students during a summer science- enrichment program. This practice teaching allows the teachers an opportunity to gain confidence with their new content knowledge and instructional skills before they teach the lessons in their own classrooms during the academic year. Monthly follow-up workshops, classroom observations, and in-classroom instructional coaching will continue during the academic year to help teachers in the implementation of these instructional strategies and further strengthen their content knowledge. During the monthly meetings, the teachers will participate in additional inquiry/technology integrated lessons as well as work with science faculty in learning new science content. Teachers' participation in the summer workshop and monthly follow-up meetings will make them eligible for a 3-credit science content course (SMED

729) through the University of South Carolina. A final component of the program is teacher reflection and growth through the evaluation of the University faculty and teachers' videotaped instruction. Teacher reflection on videotaped instruction is built into both the summer and academic year workshops.

Evaluation of the program objectives is multifaceted and begins with the summer professional development. The project investigators will evaluate teacher content knowledge before and after the professional development and again at the end of the academic year workshops. Investigators will also evaluate teacher inquiry instructional skills through videotaped classroom observations of the workshop-developed lessons. Through watching and evaluating their own videotapes during workshops, the teachers will gain insight into the strengths and weaknesses in their instructional skills and content knowledge. In addition to measuring changes in the teachers' content and instructional skills, the investigators will also measure student content gains before and after workshop-developed lessons.

Over the four-year project, the professional development will improve the science content and pedagogy of at least 100 South Carolina teachers and in the process improve the academic achievement of thousands of high school students. Publication and presentation of project results at both the state and national level will result in additional teacher quality gains.

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***Proposal # ITQ06-09: Using Problem Based Learning in Mathematics Classrooms – Grades 6-8***

Project Directors: Valerie Duarte  
School of Education  
University of South Carolina – Upstate

Using Problem Based Learning in Mathematics Classrooms – Grades 6-8 is a partnership project between the University of South Carolina Upstate and the Greenville County School District. This proposal is aimed at impacting student achievement in mathematics through high quality teaching and support experiences for teachers, and students. This project is a research-based program designed to provide support for all students to reach high standards in mathematics, and create bridges between Greenville County School District mathematics teachers in grades 6-8, district officials, and the University of South Carolina Upstate. This project will facilitate effective implementation of the South Carolina State Mathematics Curriculum Standards and the standards of the National Council of Teachers of Mathematics (NCTM).

This project is comprised of the following four major components: 1) Creating a summer institute that will provide opportunities for teachers to become more proficient with the conceptual underpinnings of Problem-Based Learning; examine and explore

research-based experiences for teaching mathematics for understanding; (2) Designing exemplary learning tasks that build on the experiences of problem-based learning for students. These tasks will be implemented in participants' classrooms; 3) Creating bi-monthly seminars for teacher cadres across grades and schools of the Greenville County School District to participate in ongoing collaboration and reflection of classroom experiences. Teachers will share their instructional experiences, analyze student work samples and share a videotape lesson using PBL; and (4) Creating and implementing a parent forum to provide opportunities for increasing parents' knowledge and support for exemplary teaching and learning in mathematics.

The sustained impact and expected benefits of this proposal will result in the formulation of program changes designed to raise academic standards for all students and to increase student success rates in mathematics at 6-8 grade levels.

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***Proposal # ITQ06-10: Pee Dee Leadership Academy***

Project Directors: Jonatha W. Vare  
Center for Pedagogy  
Winthrop University

Winthrop University proposes to collaborate with four high-need school districts in the Pee Dee region of South Carolina (Clarendon 3, Darlington County, Marion 2, and Marlboro County) to prepare two cohorts of aspiring principals (25 per cohort) and to provide standards-based professional development for current principals through a Pee Dee Leadership Academy. The proposed academy addresses several areas of need: (1) a national shortage of qualified principals; (2) specific principal vacancies projected in the four partnering districts; and (3) professional development for current principals to meet curriculum standards. Specific needs of Clarendon 3, Darlington County, Marion 2, and Marlboro County were determined through surveys and assessments conducted by the partnering districts themselves, data reported by the South Carolina Department of Education (2004;2005), and research-based reports about principal preparation and curriculum leadership for today's schools (Bottoms & O'Neill, 2001; ERS, 1998; Levine, 2005; SREB, 2005). During the next five to ten years, several dozen highly qualified principals and assistant principals will be needed to fill leadership positions in the four partnering districts. None of the districts has a program in place to prepare qualified candidates for positions as principals.

Design of the Pee Dee Leadership Academy is based on collaboration between Winthrop University and the four partnering districts. The project includes a Principal Preparation Program for aspiring leaders and a Professional Development Program for current principals. In the Principal Preparation Program, aspiring leaders in the four partnering districts will complete an accredited, nationally-recognized Master of

Education in Educational Leadership program through Winthrop University, thereby qualifying them for certification as school principals. The curriculum of the program is aligned with SREB's leadership modules (SREB, 2005), ELCC standards, and ISLLC standards. Courses will be taught at a central location within the Pee Dee region, and each M.Ed. candidate will receive a laptop computer to use while completing the program. Internships will be supervised by Winthrop faculty and district mentors who will be selected through superintendents' recommendations. Winthrop faculty will develop an internship handbook based on current research and provide training to mentors of aspiring principals. Each cohort will complete the program in two years.

In the second component, faculty in the College of Education and the College of Arts and Sciences will partner with district personnel to provide a Professional Development Program for current principals. Five Winthrop faculty members and 16 district administrators will attend SREB module training together. Superintendents will select SREB modules for personnel training based on districts' needs. After participating in the training, Winthrop faculty and district administrators will replicate the curriculum leadership training for additional personnel within the four partnering districts.